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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,495

09/22/2003

Kia Silverbrook

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EXAMINER

CUTLER, ALBERT H

ART UNIT

PAPER NUMBER

2622

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/666,495

Applicant(s)

SILVERBROOK, KIA

Examiner

Albert H. Cutler

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responsive to communication filed on April 30, 2007. Claims 1-11 are pending in the application and have been examined by the examiner.

Information Disclosure Statement

2. The Information Disclosure Statement (IDS) mailed on April 30, 2007 was received and has been considered by the examiner.

Response to Arguments

3. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarbadhikari et al.(US 5,477,264) in view of Hara et al.(US 5,726,435).

Consider claim 1, Sarbadhikari et al. teach:

A camera control print medium("memory card", 24, figure 2) adapted for use with:

(a) a digital camera("electronic camera", figure 2, column 3, line 30) comprising a print media reader("Ram Instruction Memory", 31, figure 2), an image sensor(12, figure 2) adapted to capture an original image(column 5, line 59 through column 6, line 10), and a controllable image manipulator("processor", 20, figure 2) adapted to manipulate the original image to form a manipulated image(The original image is manipulated using software enhancements, column 7, lines 51-67.); and

(b) at least one image manipulation print medium("memory card", 24, figure 2.

Note: The image manipulation print medium can also be in the form of a non-removable electrically programmable non-volatile memory located inside the camera, column 11, lines 18-22.) comprising a surface having at least one encoded(column 4, line 41) image manipulation instruction disposed therein or thereon(The memory card contains image manipulation instructions within(i.e. has a surface having at least one encoded image manipulation instruction therein), column 6, lines 40-44 and 53-66.);

the camera control print medium("memory card", 24, figure 2) comprising a surface having at least one encoded camera control instruction disposed therein or thereon(The memory card contains image manipulation instructions within(i.e. has a

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surface having at least one encoded image manipulation instruction therein), column 6, lines 40-44 and 53-66.), the camera control instruction being adapted:

(a) to be readable by said print media reader(column 7, lines 60-67); and

(b) when so read, to cause the controllable image manipulator(20) to perform at least one operation in relation to the at least one image manipulation print medium, when the at least one image manipulation print medium is subsequently read by the print media reader(Column 7, lines 60-67. When the memory card(i.e. image manipulation print medium) is read by the RAM instruction memory(i.e. print media reader), the processor(i.e. image manipulator) is subsequently instructed to perform the image manipulation instruction contained within the memory card. This instruction includes applying new algorithms(i.e. manipulation operations) which provide higher quality pictures and special features.).

However, Sarbadhikari et al. do not explicitly teach that the surface of the camera control print medium has encoded camera control instructions printed therein or thereon.

In a field of endeavor relevant to the pertinent problem of providing a camera with control instructions, Hara et al. teach of an optically readable two-dimensional code, and a method and apparatus using the same. Hara et al. is similar to Sarbadhikari et al. in that an image sensor("CCD Camera", 500a) is used to provide an image to a computer("Host Computer", see figure 17). Hara et al. is also similar in that a computer readable medium is used to transmit code to a computer(column 7, line 55 through

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column 8, line 18), which then executes that code to perform a function(column 16, lines 39-42).

In addition to the teachings of Sarbadhikari et al., Hara et al. teach that control instructions(column 16, lines 39-42) are encoded in two dimensions(The control instructions are in the form of an optically readable two-dimensional bar code. column 7, line 55 through column 8, line 18, see figures 9a and 9b) on the surface of a control print medium(Computer control instructions are printed on a computer readable medium using the method shown in figure 14, column 14, line 53 through column 15, line 3). Hara et al. is further similar in that instructions are read into RAM before being processed(column 15, lines 18-21). A CCD reader(500a) as taught by Hara et al. can be included at the interface(26, figure 2) of the electronic camera taught by Sarbadhikari et al. in order to read the two-dimensional code(Hara et al., column 15, lines 4 through column 16, line 42, see figures 15 and 16). Furthermore, the camera control print medium("memory card", 24, figure 2) taught by Sarbadhikari et al. can be replaced with an optically readable two-dimensional bar code(figures 9a and 9b) having computer control instructions printed thereon as taught by Hara et al.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include a CCD reader and have control instructions printed on the surface of a camera control print medium as taught by Hara et al. in the electronic camera taught by Sarbadhikari et al. for the benefit that inputting control instructions through the reading of a bar code located on the surface of a camera control print medium enables simple and fast processing(Hara et al., column 17, line

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13), and using a two dimensional bar code further constitutes an improvement by allowing a larger amount of data to be stored in a relatively small area when compared to a one dimensional bar code(Hara et al., column 1, lines 26-29).

Consider claim 2, and as applied to claim 1 above, Sarbadhikari et al. further teach:

the at least one operation in relation to the at least one image manipulation print medium(see claim 1 rationale) comprises manipulating, more than once, the original image, in accordance with the at least one encoded image manipulation instruction, to form the manipulated image("Any combination of image processing files may be used"(i.e. the original image can be manipulated more than once to form the manipulated image), column 7, line 67 through column 8, line 3).

Consider claim 3, and as applied to claim 1 above, Sarbadhikari et al. further teach:

the at least one operation in relation to the at least one image manipulation print medium(see claim 1 rationale) comprises manipulating, more than once, a previously manipulated image, in accordance with the at least one encoded image manipulation instruction, to form the manipulated image("Any combination of image processing files may be used"(i.e. the original image can be manipulated more than once to form the manipulated image), column 7, line 67 through column 8, line 3. It is clear that if a large number of image processing files are used to perform image manipulations, then a

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previously manipulated image(such as an image after a first manipulation) can be manipulated more than once(such as with the second, third, and any other subsequent manipulations).).

Consider claim 4, and as applied to claim 1 above, Sarbadhikari et al. further teach:

the at least one operation in relation to the at least one image manipulation print medium(see claim 1 rationale) comprises manipulating a previously manipulated image, in accordance with the at least one encoded image manipulation instruction, to form the manipulated image("Any combination of image processing files may be used"(i.e. the original image can be manipulated more than once to form the manipulated image), column 7, line 67 through column 8, line 3. It is clear that if a large number of image processing files are used to perform image manipulations, then a previously manipulated image(such as an image after a first manipulation) can be manipulated (such as with the second, third, and any other subsequent manipulations).).

Consider claim 5, and as applied to claim 1 above, Sarbadhikari et al. further teach:

the at least one image manipulation print medium(see claim 1 rationale) comprises:

a first image manipulation print medium having a first encoded image manipulation instruction disposed in or on its surface(The image data files and

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enhancement files(i.e. image manipulation instructions) can be stored within a non-removable electrically programmable non-volatile memory(i.e. a first image manipulation print medium) located inside the camera, column 11, lines 18-22), and a second image manipulation print medium("memory card", 24, figure 2) having a second encoded image manipulation instruction disposed in or on its surface(The memory card contains image manipulation instructions within(i.e. has a surface having at least one encoded image manipulation instruction therein), column 6, lines 40-44 and 53-66.), and wherein the at least one operation in relation to the at least one image manipulation print medium comprises:

manipulating the original image in accordance with the first encoded image manipulation instruction(The image manipulation instructions can include instructions for gain adjustment, exposure adjustment, color adjustment and other applications, column 8, line 50 through column 9, line 1. These instructions can be used to manipulate the original image, and can be contained in the first image manipulation print medium, column 11, lines 18-22.) to form an intermediate manipulated image(i.e. a gain corrected image, a color corrected image, etc.) and then manipulating the intermediate manipulated image in accordance with the second encoded image manipulation instruction to form the manipulated image(The memory card(i.e. the second image manipulation medium) can contain templates with which the intermediate manipulated image is combined to form the manipulated image, column 10, lines 24-53, figure 8. Image manipulations can be done when the image is first captured, processed, and stored, or post-capture, column 8, lines 20-23. Therefore, a variety of image

manipulations can be performed during different time periods to create the final manipulated image.).

Consider claim 6, and as applied to claim 1 above, Sarbadhikari et al. further teach:

the at least one image manipulation print medium(see claim 1 rationale) comprises:

a first image manipulation print medium having a first encoded image manipulation instruction disposed in or on its surface(The image data files and enhancement files(i.e. image manipulation instructions) can be stored within a non-removable electrically programmable non-volatile memory(i.e. a first image manipulation print medium) located inside the camera, column 11, lines 18-22), and a second image manipulation print medium("memory card", 24, figure 2) having a second encoded image manipulation instruction disposed in or on its surface(The memory card contains image manipulation instructions within(i.e. has a surface having at least one encoded image manipulation instruction therein), column 6, lines 40-44 and 53-66.), and wherein the at least one operation in relation to the at least one image manipulation print medium comprises:

manipulating a previously manipulated image in accordance with the first encoded image manipulation instruction(The image manipulation instructions can include instructions for gain adjustment, exposure adjustment, color adjustment and other applications, column 8, line 50 through column 9, line 1. These instructions can

be used to manipulate a previously manipulated image, and can be contained in the first image manipulation print medium, column 11, lines 18-22. Image manipulations can be performed when the image is first captured, processed, and stored, or post-capture, column 8, lines 20-23. Therefore, a variety of image manipulations can be performed during different time periods to create the final manipulated image. It is evident that if a large number of image manipulations are performed, some of those manipulations will be performed on previously manipulated images.) to form an intermediate manipulated image(i.e. a gain corrected image, a color corrected image, etc.) and then manipulating the intermediate manipulated image in accordance with the second encoded image manipulation instruction to form the manipulated image(The memory card(i.e. the second image manipulation medium) can contain templates with which the intermediate manipulated image is combined to form the manipulated image, column 10, lines 24-53, figure 8.)

Consider claim 7, and as applied to claim 1 above, Sarbadhikari et al. teach of a camera control print medium containing encoded camera control instructions(see claim 1 rationale).

However, Sarbadhikari et al. do not explicitly teach that the camera control instructions are encoded in two dimensions on the surface of the camera control print medium.

Hara et al. teach that control instructions(column 16, lines 39-42) are encoded in two dimensions(The control instructions are in the form of an optically readable two-

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dimensional bar code. column 7, line 55 through column 8, line 18, see figures 9a and 9b) on the surface of a control print medium(Computer control instructions are printed on a computer readable medium using the method shown in figure 14, column 14, line 53 through column 15, line 3). A CCD reader(500a) as taught by Hara et al. can be included at the interface(26, figure 2) of the electronic camera taught by Sarbadhikari et al. in order to read the two-dimensional code(column 15, lines 4 through column 16, line 42, see figures 15 and 16).

Consider claim 8, and as applied to claim 1 above, Sarbadhikari et al. teach of at least one encoded camera control instruction(see claim 1 rationale).

However, Sarbadhikari do not explicitly teach that said control instruction is printed on the surface of the camera control print medium.

Hara et al. teach that control instructions(column 16, lines 39-42) are encoded in two dimensions(The control instructions are in the form of an optically readable two-dimensional bar code. column 7, line 55 through column 8, line 18, see figures 9a and 9b) on the surface of a control print medium(Computer control instructions are printed on a computer readable medium using the method shown in figure 14, column 14, line 53 through column 15, line 3). Hara et al. is further similar in that instructions are read into RAM before being processed(column 15, lines 18-21). A CCD reader(500a) as taught by Hara et al. can be included at the interface(26, figure 2) of the electronic camera taught by Sarbadhikari et al. in order to read the two-dimensional code(column 15, lines 4 through column 16, line 42, see figures 15 and 16).

Consider claim 9, and as applied to claim 8 above, Sarbadhikari et al. teach of at least one camera control print instruction(see claim 1 rationale).

However, Sarbadhikari et al. do not explicitly teach that said camera control print instructions is printed on the surface of the camera control print medium in the form of a plurality of dots.

Hara et al. teach that camera control print instructions are printed on the surface of a camera control print medium(see figure 14) in the form of a plurality of dots("dark cells", see figure 17, column 8, lines 4-6).

Consider claim 10, and as applied to claim 1 above, Sarbadhikari et al. teach that the camera control print medium is in the form of a card("memory card", 24, figure 2).

Consider claim 11, and as applied to claim 10 above, Sarbadhikari et al. teach that the camera control print medium is in the form of a repetition card(Sarbadhikari et al. teach that different memory cards can be used for different applications, column 8, lines 50-52, column 10, lines 36-39. It is evident that because the memory card contains the image manipulation instructions within itself, and due to the fact that it is removable(column 7, lines 31-35), the memory card can be inserted into the camera on more than one occasion(i.e. it is in the form of a repetition card).).

Conclusion

7. The objections made by the Examiner to the drawings are hereby withdrawn in view of Applicant's response.
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

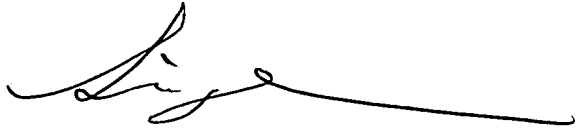
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert H. Cutler whose telephone number is (571)-270-1460. The examiner can normally be reached on Mon-Fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571)-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC



LIN YE
PRIMARY PATENT EXAMINER